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from and not in contact with a surface of said patient's heart, at least one of said subset of electrodes being located proximate said maximum diameter and at least one of said subset being located at a location away from said maximum diameter; and

c) second positioning means coupled to said set of electrodes for placing a second predetermined subset of said set of electrodes into contact with a surface of said patient's heart, said second predetermined subset being different from said first subset.

2. The apparatus of claim 1 wherein said set of electrodes comprises at least twenty-four electrodes.

5.

A catheter assembly for mapping the interior of a patient's heart comprising:

a) a first set of electrode sites defining a first electrode array, at least one of said first set of electrodes being located near the maximal diameter of catheter assembly and at least one of said first set of electrodes being located apart from said maximal diameter;

b) said electrode array adapted to be positioned within said patient's heart with a substantial number of said electrodes not in contact with said heart; and

c) a second set of electrode sites adapted to be located in contact with said patient's heart, said second set of electrode sites being different from said first set of electrode sites.

#### REMARKS

##### Pending Claims:

In this application, claims 1-3 are currently pending. Claims 1-3 are amended by this Response. Entry of these amendments is respectfully requested.

Applicant has carefully considered both the Hess reference as well as the Siegel reference and the rejections based on section 112, 102 and 103.

In the case of Siegel the non-contact electrodes are shielded by balloons which prevent these electrodes from touching the wall. Applicant's claims have been amended to ensure that at least some of the non-contact electrodes are on the maximal

diameter of the array. For this reason the Siegel reference is not an anticipation (102) of the amended claims. This argument address the rejection of claims 1 and 3.

In Hess the device deforms and places contact electrodes both on the distal tip as well on the radial arms of the device. Applicant's amended claims call for non-contact electrodes to be placed at a location which does not correspond to the maximum diameter of the catheter. The claims as amended are not obvious in view of the references because Hess is not interested in placing electrodes in a non-contact position as required by Applicant's invention, and the Siegel reference does not teach the use of non-contact references <sup>electrodes</sup> for mapping. There is no motivation to combine the references in a way which gives rise to the Applicant's now claimed invention. An obvious combination of Hess and Siegel is most likely to involve the placement of a radial array at the distal tip of a Siegel-like device to replace the most distal balloon 26. This argument addresses the section 103 rejections.

Kindly reconsider the double patenting rejection based on the amendments. Applicant will file a terminal disclaimer to over come the rejection if it is the only remaining objection to the claims as now amended.

For these reasons Applicant requests reconsideration of the amended claims.

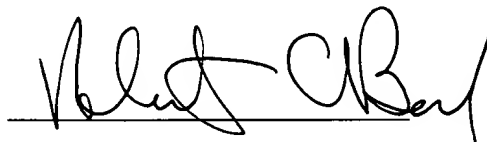
### CONCLUSION

All of the claims remaining in this application should now be seen to be in condition for allowance. The prompt issuance of a notice to that effect is solicited.

Respectfully submitted,  
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By its attorneys:

Date:

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